**WHAT IS CLAIMED IS:**

1. A vaccine for protecting a horse against diseases associated with EHV-1, EHV-4 or a combination thereof comprising:

chemically inactivated EHV-1 KyA virus; and

an adjuvant which includes cross-linked olefinically unsaturated carboxylic acid polymer.

2. The vaccine of claim 1 wherein the EHV-1 KyA virus is chemically inactivated by treatment with a chemical inactivating agent which includes a compound selected from the group consisting of ethylenimine, derivatives of ethylenimine and mixtures thereof.

3. The vaccine of claim 2 wherein the EHV-1 KyA virus is chemically inactivated by treatment with binary ethylenimine.

4. The vaccine of claim 1 further comprising inactivated EHV-4.

5. The vaccine of claim 1 further comprising inactivated equine influenza virus.

6. The vaccine of claim 5 wherein the inactivated equine influenza virus includes inactivated EIV virus subtype A1.

7. The vaccine of claim 6 wherein the inactivated EIV virus subtype A1 includes inactivated EIV A1 virus strain A/EQ1/Newmarket/77.

8. The vaccine of claim 5 wherein the inactivated equine influenza virus includes inactivated EIV virus subtype A2.

9. The vaccine of claim 8 wherein the inactivated EIV virus subtype A2 includes inactivated EIV A2 virus strain Newmarket/2/93, inactivated EIV A2 virus strain Kentucky/95 or a mixture thereof.

10. The vaccine of claim 5 comprising inactivated EIV virus subtype A1 and inactivated EIV virus subtype A2.

11. The vaccine of claim 10 comprising inactivated EIV A1 virus strain A/EQ1/Newmarket/77, inactivated EIV A2 virus strain Newmarket/2/93, and inactivated EIV A2 virus strain Kentucky/95.

12. The vaccine of claim 1 wherein said vaccine is capable of protecting horses against EHV-1 and EHV-4.

13. The vaccine of claim 1 wherein the cross-linked olefinically unsaturated carboxylic acid polymer includes cross-linked acrylic acid polymer.

14. A vaccine for protecting a horse against diseases associated with EHV-1, EHV-4 or a combination thereof comprising:

EHV-1 KyA virus inactivated by treatment with a chemical inactivating agent which includes ethylenimine, a derivative of ethylenimine or a mixture thereof; and

a bioadhesive adjuvant which includes a cross-linked olefinically unsaturated carboxylic acid polymer.

15. The vaccine of claim 14 wherein the chemical inactivating agent includes binary ethylenimine.

16. A vaccine for protecting a horse against diseases associated with EHV-1, EHV-4 or a combination thereof comprising:

inactivated EHV-1; and

an adjuvant which includes a cross-linked acrylic acid polymer having a viscosity of no more than about 20,000 cPs at 20 rpm as a 1.0 wt.% aqueous solution at pH 7.5.

17. A method for protecting a horse against diseases associated with EHV-1, EHV-4 or a combination thereof comprising:

administering to said horse a vaccine comprising chemically inactivated EHV-1 KyA virus and an adjuvant which includes cross-linked olefinically unsaturated carboxylic acid polymer.

18. The method of claim 17 wherein administering the vaccine to said horse comprises:
parenterally administering the vaccine; and
intranasally administering the vaccine.

19. The method of claim 18 wherein administering the vaccine to said horse comprises:
parenterally administering the vaccine at least once in a first step; and
intranasally administering the vaccine in a subsequent step.

20. The method of claim 17 wherein the vaccine further comprises inactivated EHV-4.

21. The method of claim 17 wherein the vaccine further comprises inactivated equine influenza virus.

22. The method of claim 21 wherein the vaccine comprises inactivated EIV virus subtype A1 and inactivated EIV virus subtype A2.

23. A method of producing an equine herpesvirus vaccine comprising:
(a) inoculating simian cells with an EHV-1 KyA virus;
(b) incubating the inoculated simian cells;
(c) harvesting EHV-1 KyA virus from the incubated cells; and
(d) treating the harvested cells with a chemical inactivating agent which includes ethylenimine, a derivative of ethylenimine or a mixture thereof to form inactivated EHV-1 KyA virus.

24. The method of claim 23 wherein the simian cells are Vero cells.

25. The method of claim 23 wherein the chemical inactivating agent includes binary ethylenimine.

26. The method of claim 23 further comprising adding an adjuvant to the inactivated EHV-1 KyA virus, wherein the adjuvant includes a cross-linked acrylic acid polymer.

27. A kit comprising in combination, (1) a dispenser capable of administering a vaccine to a horse; and (2) a composition to protect against diseases associated with EHV-1, EHV-4 or a combination thereof, wherein the composition comprises:

chemically inactivated EHV-1 KyA virus; and

an adjuvant which includes cross-linked olefinically unsaturated carboxylic acid polymer.

28. The kit of claim 27 wherein the dispenser is capable of dispensing its contents as droplets; and the composition is capable of protecting against diseases associated with EHV-1, EHV-4 or a combination thereof when administered intranasally.

29. A vaccine for protecting a horse against diseases associated with equine herpesviruses and equine influenza virus comprising:

chemically inactivated EHV-1 KyA virus;

inactivated EHV-4 virus;

inactivated EIV virus subtype A1;

inactivated EIV virus subtype A2; and

an adjuvant.

30. The vaccine of claim 29 wherein the inactivated EIV virus subtype A1 includes inactivated EIV A1 virus strain A/EQ1/Newmarket/77; and the inactivated EIV virus subtype A2 includes inactivated EIV A2 virus strain Newmarket/2/93 and inactivated EIV A2 virus strain Kentucky/95.

31. The vaccine of claim 29 wherein the adjuvant comprises a bioadhesive adjuvant which includes a cross-linked acrylic acid polymer.

add a17

add B7